ENMUV

EXTERNAL USB VIDEO ADAPTER (DVI / VGA)

User's Manual

Safety Information

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and

(2) This device must accept any interference received, including interference that may cause undesired operation.

CE Mark Warning

This is a Class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

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Introduction

The ENMUV is a simple way to add additional video adapters to your computer with a high resolution DVI or VGA monitor. It allows for connecting up to six monitors to your desktop or laptop using free USB ports.

Features

- Easy and quick to connect and use.
- Compatible with all CRT and Flat Panel monitors.
- Standard and wide screen aspect ratios.
- Fully integrated into Windows® XP, Windows Vista™.
- Supports Windows Vista™ Aero mode.
- Fully integrated into the Windows system and appear as a virtual graphics card (VGC).
- Full flexibility to clone or extend desktop display space.
- Static, interactive and video content.
- Auto display identification using VESA compliant protocols.
- Fully USB 2.0 bus powered.
- User interfaces already built in to OS.
- Support up to six monitors at the same time via own adaptor.
- Supports 16 bit and 32-bit True Color depth.
- High-definition displays up to UXGA 1600 x 1200.

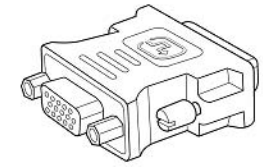
System Requirement

- PC with 1.2 GHz or higher processor clock speed, with an Intel Core 2 Duo or equivalent CPU.
- Intel-based Apple computers including Mac Mini (Intel), iMac (Intel), MacBook, MacBook Pro, MacBook Air, and Mac Pro.
- 512 megabytes (MB) of RAM for a single attached screen, 1 gigabyte (GB) of RAM for two attached screens, more for more attached screens.
- At least one USB 2.0 port.
- 30 megabytes (MB) of free disk space.

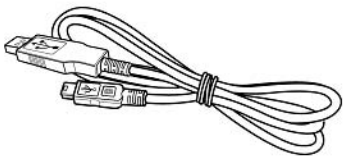
Note: Power-PC based Macintosh computers, such as late-model iMacs, PowerBooks and PowerMacs are not currently supported.

Package Contents

Check the package contents of your ENMUV. It should contain the following:

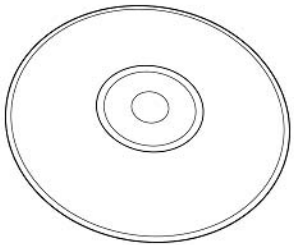


DVI to VGA Adapter



USB Cable

The ENMUV Adapter



Installation CD

❖ The ENMUV Adapter:

The ENMUV adapter allows you to connect monitors to your computer using a USB connection.

❖ DVI (Male) to VGA (Female) Adapter:

This adapter will convert your DVI port to a classic VGA port allowing you to connect your VGA monitor to the ENMUV's DVI port.

❖ USB Cable:

USB 2.0 Cable, mini USB Connector. Connects to the computer and the ENMUV.

❖ Installation CD

The CD contains the driver and utility for the ENMUV

Software Installation

Supported Operating Systems

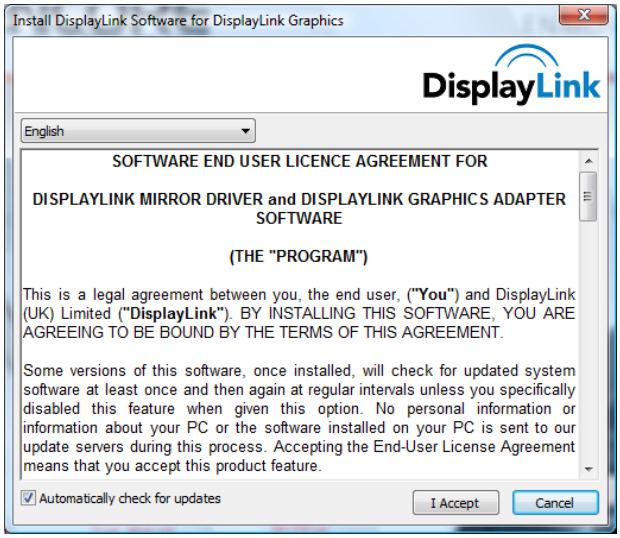
- Microsoft Windows® 2000 Service Pack 4 and up.
- Microsoft Windows® XP Service Pack 2 and up.
- Microsoft Windows Vista™.
- Intel®-based Mac® OS X (Tiger® 10.4.11, Leopard® 10.5.5, or later).

Windows Vista Installation

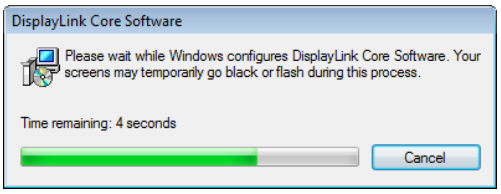
1. Insert the ENMUV CD into the CD-ROM drive. The setup screen will automatically appear.
2. Click the "**Utility Setup**" button to install driver and software.

3. When prompt for permission to continue. Click "**Continue**" to go to the next step.

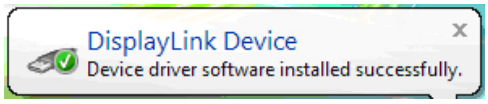
4. After reading the License Agreement click "**I Accept**" to continue. The installation will start.


Install DisplayLink Software for DisplayLink Graphics
DisplayLink
English
SOFTWARE END USER LICENCE AGREEMENT FOR
DISPLAYLINK MIRROR DRIVER and DISPLAYLINK GRAPHICS ADAPTER SOFTWARE
(THE "PROGRAM")
This is a legal agreement between you, the end user, ("You") and DisplayLink (UK) Limited ("DisplayLink"). BY INSTALLING THIS SOFTWARE, YOU ARE AGREEING TO BE BOUND BY THE TERMS OF THIS AGREEMENT.
Some versions of this software, once installed, will check for updated system software at least once and then again at regular intervals unless you specifically disabled this feature when given this option. No personal information or information about your PC or the software installed on your PC is sent to our update servers during this process. Accepting the End-User License Agreement means that you accept this product feature.
Automatically check for updates
I Accept
Cancel

5. Wait a few moments for the process to complete; the installation program will close automatically.

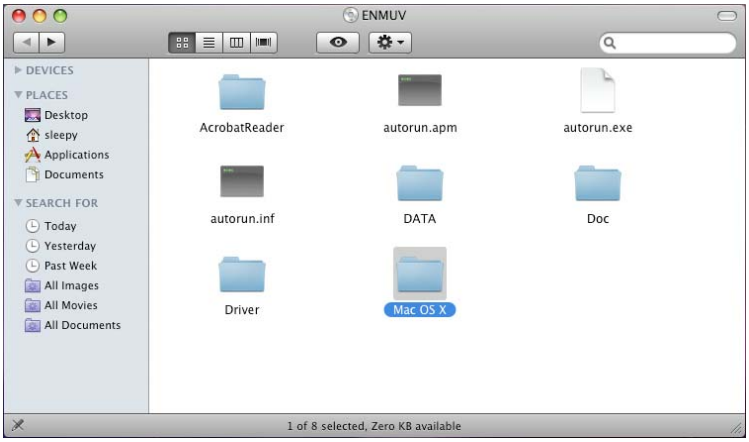

DisplayLink Core Software
Please wait while Windows configures DisplayLink Core Software. Your screens may temporarily go black or flash during this process.
Time remaining: 4 seconds
Cancel

6. Plug in the ENMUV, and wait until a message displays on your screen as shown.

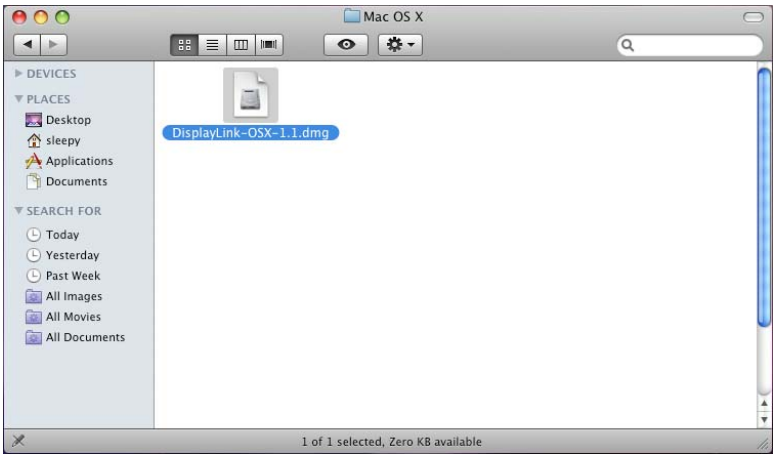


Mac OS X Installation

1. Insert the ENMUV CD into the CD-ROM drive. Locate and double-click the ENMUV CD, and then double-click the "**Mac OS X**" folder.



2. Double-click the installer disk image to mount the installer.



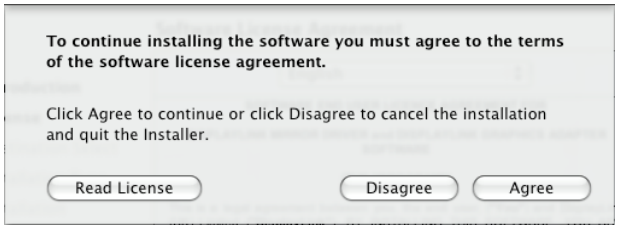
3. Open the "**DisplayLink Software Installer**" to start installation.

4. Click the "**Continue**" button.

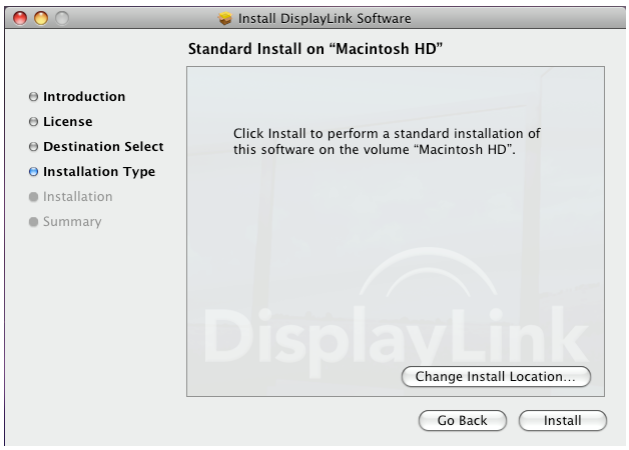
5. After reading the License Agreement, click "**Continue**" to continue.

Install DisplayLink Software
Software License Agreement
Introduction
License
Destination Select
Installation Type
Installation
Summary
English
SOFTWARE END USER LICENCE AGREEMENT FOR
DISPLAYLINK MIRROR DRIVER and DISPLAYLINK GRAPHICS ADAPTER SOFTWARE
(THE "PROGRAM")
This is a legal agreement between you, the end user, ("You") and DisplayLink (UK) Limited ("DisplayLink"). BY INSTALLING THIS SOFTWARE, YOU ARE AGREEING TO BE BOUND BY THE TERMS OF THIS AGREEMENT.
1. Licence
DisplayLink grants You a personal, non-exclusive, non-transferable licence to use one copy of the Program as acquired with this licence in accordance with any user documentation supplied with the Program and in accordance with the terms of this agreement. You may make one back-up copy of the Program, provided that such copy shall be subject to the terms of this agreement.
2. Use
You are entitled to install and use the Program on a computer that is attached to the product that contains DisplayLink's proprietary technology (the "Device") and the Program may be used to enable only the Device to be used by Your computer.
Print...
Save...
Go Back
Continue

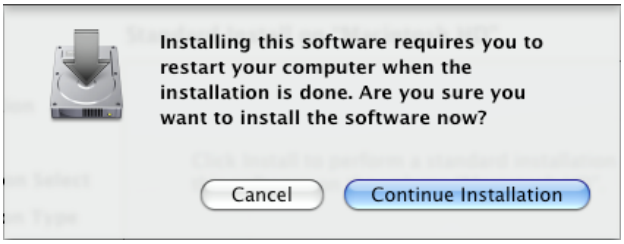
6. Click the "**Agree**" button.


To continue installing the software you must agree to the terms of the software license agreement.
Click Agree to continue or click Disagree to cancel the installation and quit the Installer.
Read License
Disagree
Agree

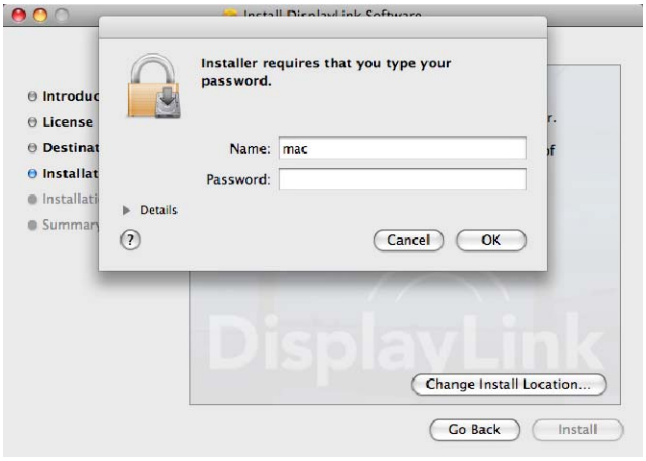
7. Click the "**Install**" button to continue. Or click the "**Change Install Location…**" button if you want designate another location.



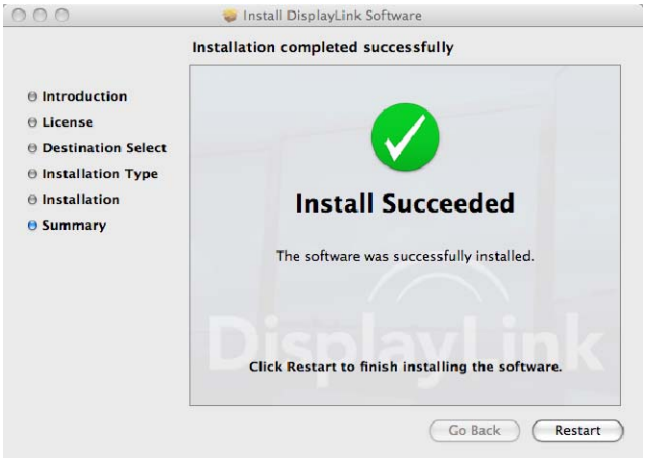
8. Click the "**Continue Installation**" button.


Installing this software requires you to restart your computer when the installation is done. Are you sure you want to install the software now?
Cancel
Continue Installation

9. When prompted for password, enter your password and click the "**OK**" button.



10. Click the "**Restart**" button to restart your computer and complete the installation.



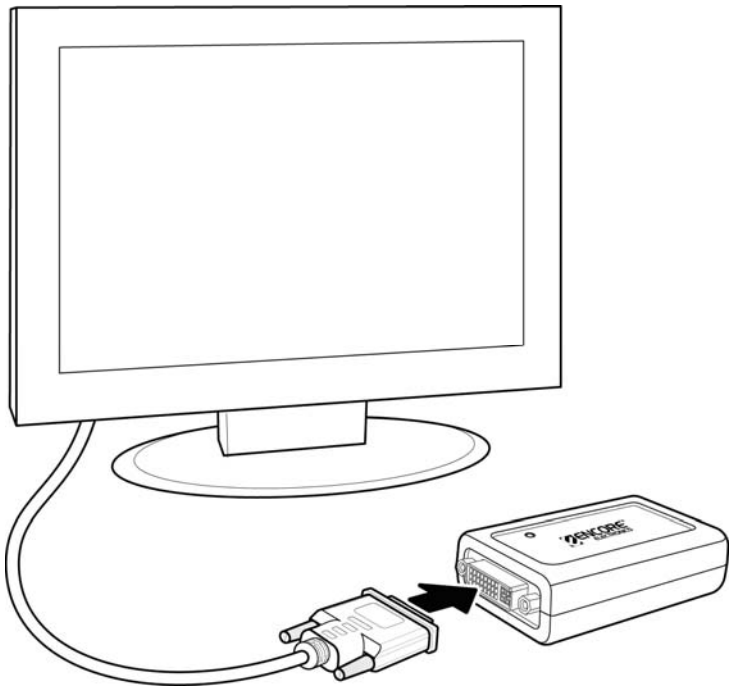
Hardware Installation

See the following illustrations for instructions on how to install your adapter.

Connecting the Adapter

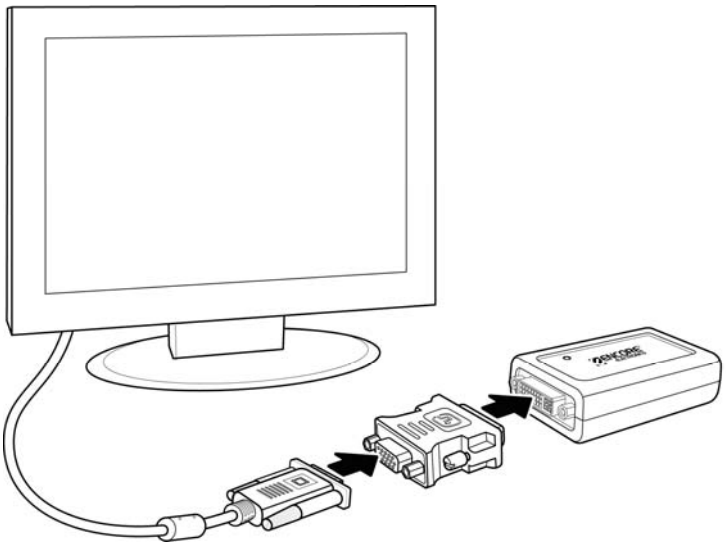
Connecting to DVI monitor

Connect the DVI monitor with the USB to DVI-I/VGA Display Adapter as shown.



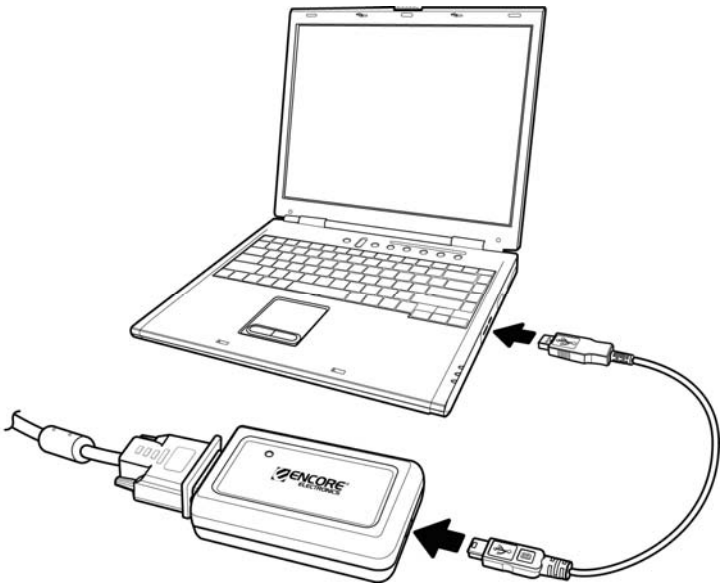
Connecting to VGA monitor

Connect the VGA monitor with the DVI to VGA adapter then to the USB to DVI-I/VGA Display Adapter as shown.



Connecting to USB port

Connect the USB cable and the USB to DVI/VGA Display Adapter as shown.



Connecting the Monitors

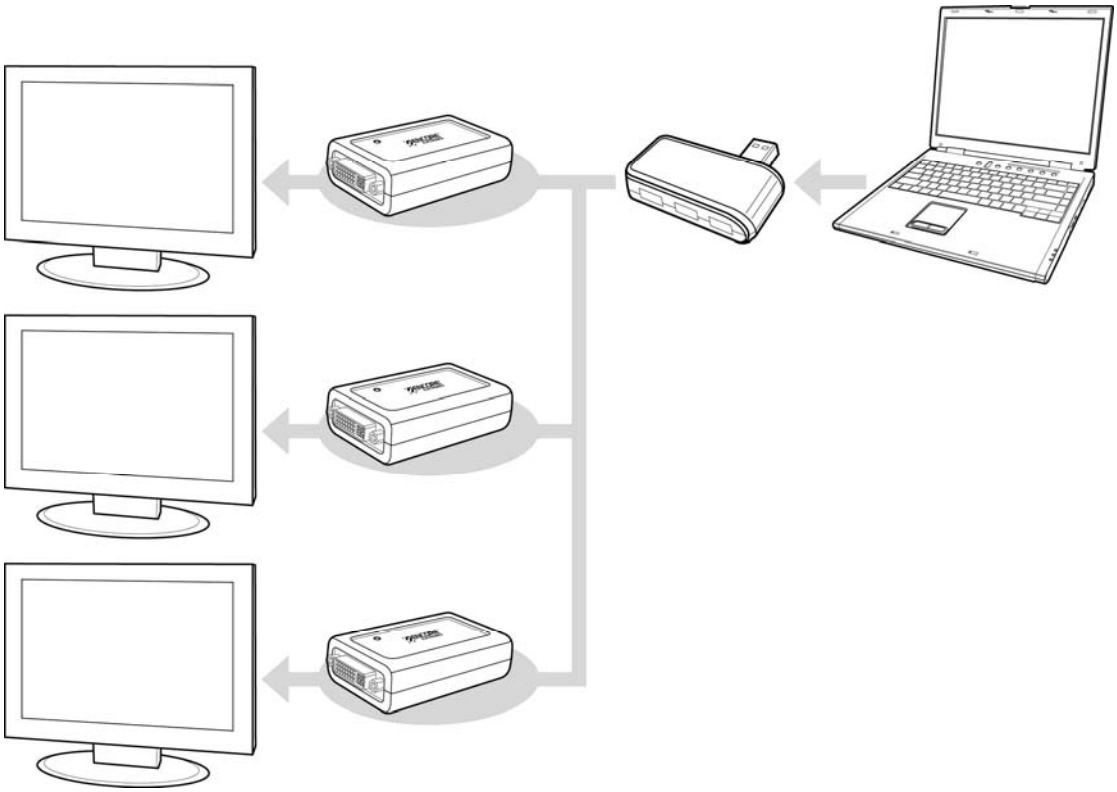
ENMUV supports up to 6 display connections to a single PC. See the following illustrations for sample setups.

Connecting 2 monitors

PC connects to two monitors via USB cables using ENMUV adapters. Monitors connect to graphics adapters via standard VGA/DVI cables.

Multiple monitors using powered USB hub

PC connects to a standard powered USB hub. Three monitors are connected to the USB hub via ENMUV adapters. Monitors connect to graphics adapters via standard VGA/DVI cables.

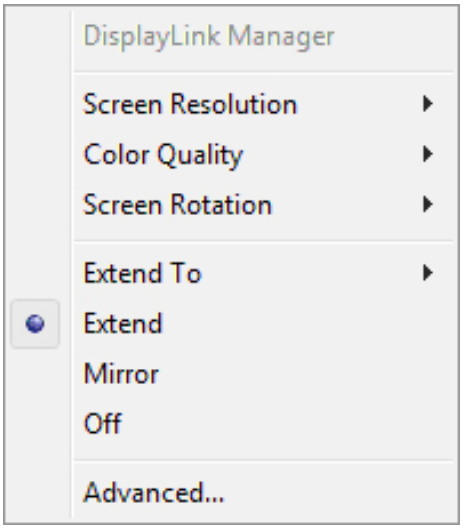


Note: A typical PC can run up to six monitors. The exact number depends on the type of content being displayed.

Configuring your Screen

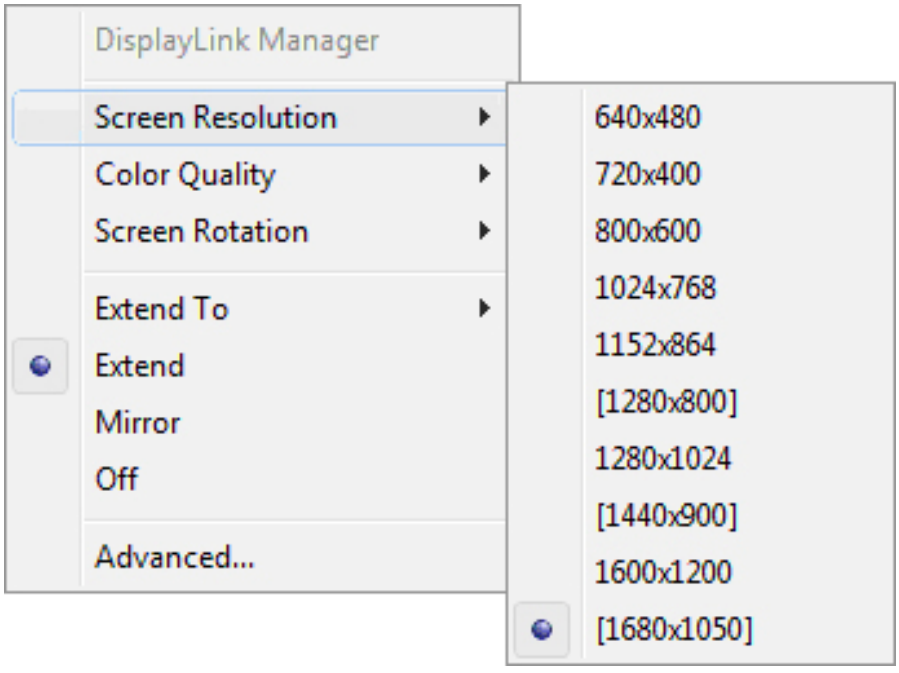
Windows 2000/XP/Vista

After software installation, connect the ENMUV to your PC. An icon will appear on the lower right corner. Click the icon to pull up the USB to DVI Convertor Manager Menu. USB to DVI Convertor Manager menu allows you to configure basic functions of your additional screens including screen resolution, color quality, screen rotation, and extend, mirror, and off mode.



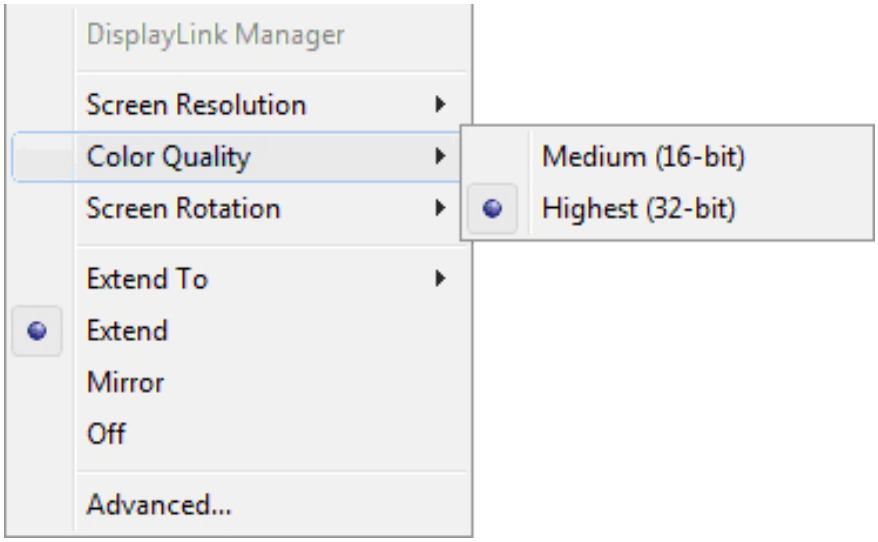
Screen Resolution

To setup the screen resolution, select an available resolution from the Screen Resolution submenu as shown.



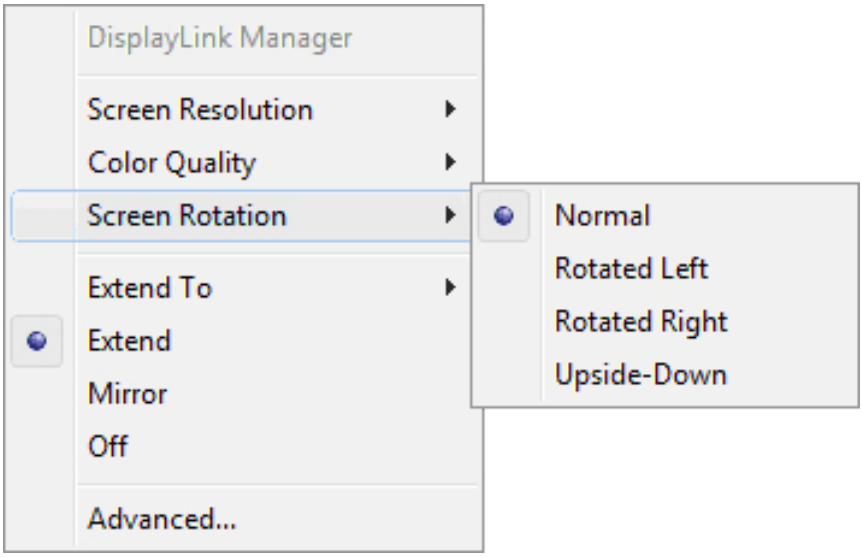
Color Quality

The Color Quality specifies how many colors are displayed on the monitor. To setup the color quality, select an available color quality from the Color Quality submenu.



Screen Rotation

To rotate your screen, choose **Rotated Left**, **Rotated Right**, and **Upside-Down** from the Screen Rotation submenu. Choose **Normal** to return the screen to the original orientation.



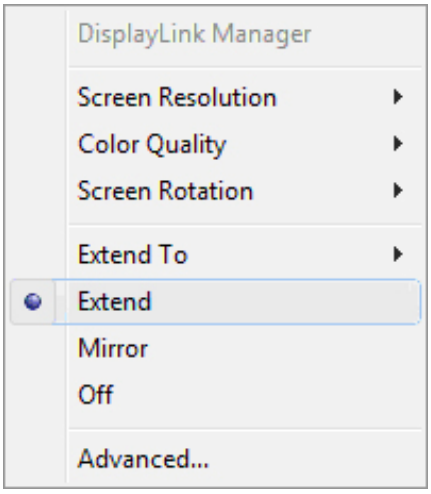
Screen Positioning

If your computer is connected to more than two monitors, you can assign each of the monitors to a different mode.

Extend Mode

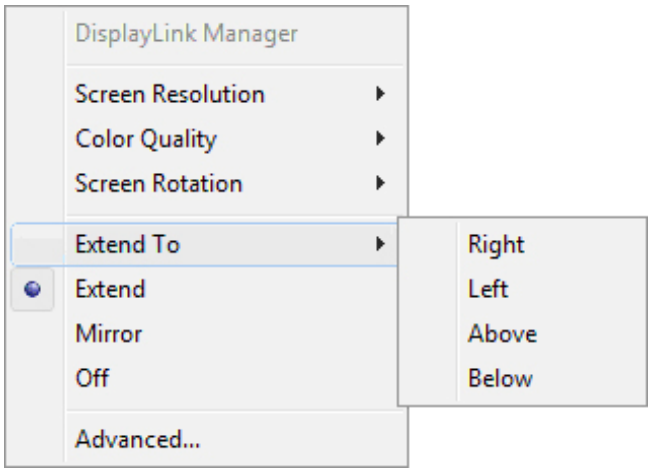
Extend mode allows you to add extensions to your existing desktop using the extra monitors.

Select **Extend** to switch to the Extend Mode.

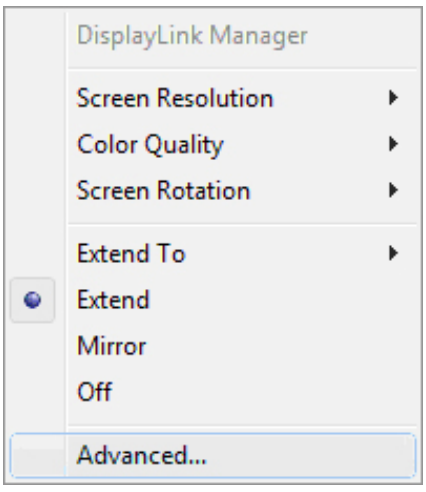


Configuring Extend Mode

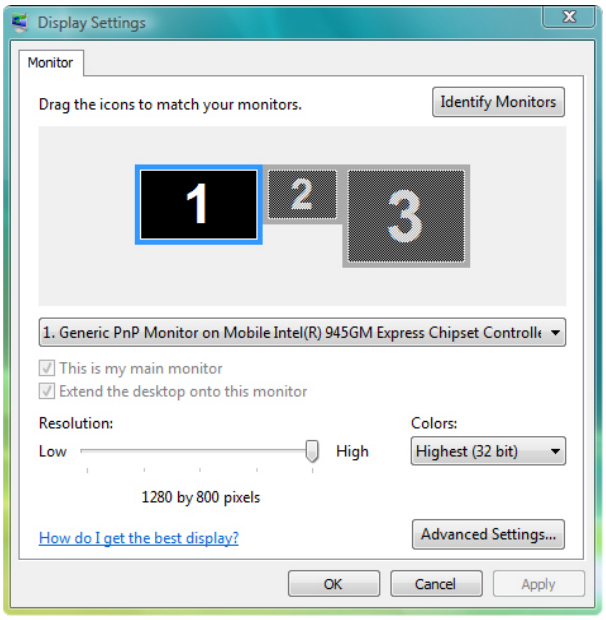
1. Select **Right, Left, Above** and **Below** from the Extend To submenu to choose where to extend your desktop. Or



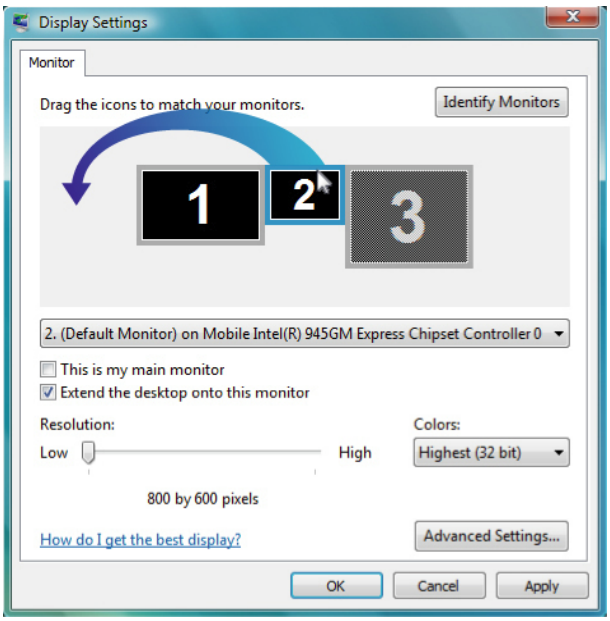
2. Select **Advanced** from the menu to activate Display Settings.

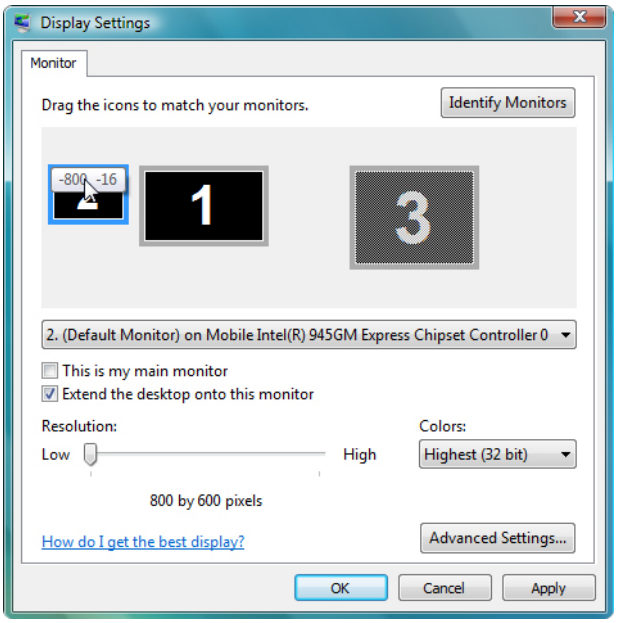


3. Display Settings window now opens. To move the position of a display, click and hold the monitor icon you wish to move.



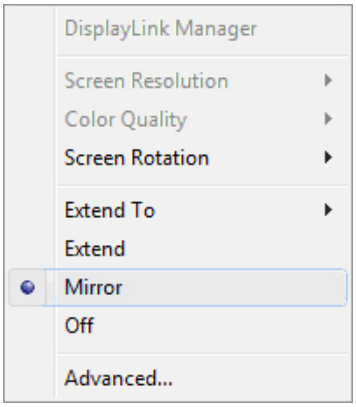
4. Drag it to the desired position. The display will be highlighted with a blue border whilst you are moving the display to its new position.





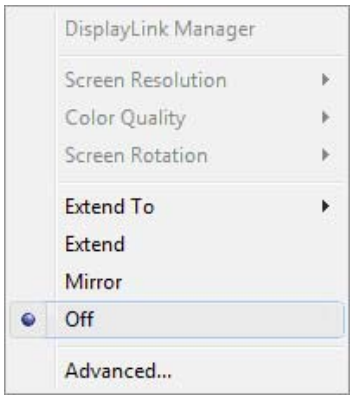
Mirror Mode

Mirror mode allows you to replicate the exact image from your primary monitor to your secondary monitor. To activate Mirror Mode select **Mirror** from the menu.



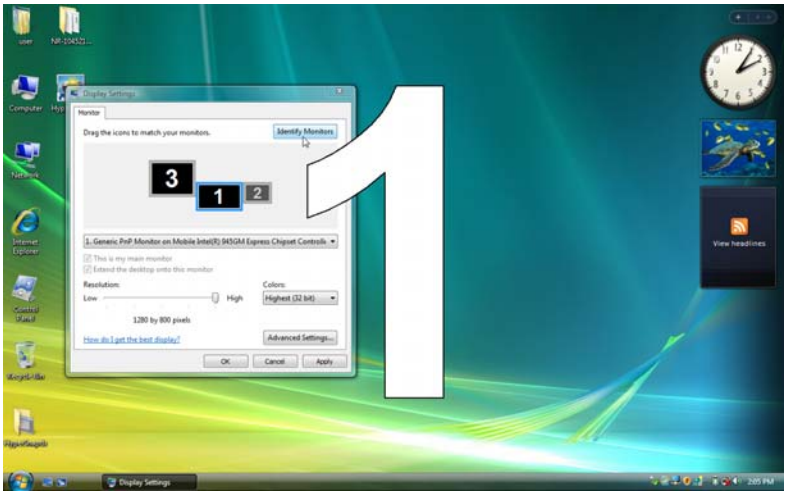
Off Mode

To disable the secondary monitor select **Off** from the menu.



Identifying the Monitors

To identify the active monitor, select **Advanced** from the menu to activate Display Settings and then click the **Identify Monitors** button. A number will be shown on the screen to identify the active monitor.

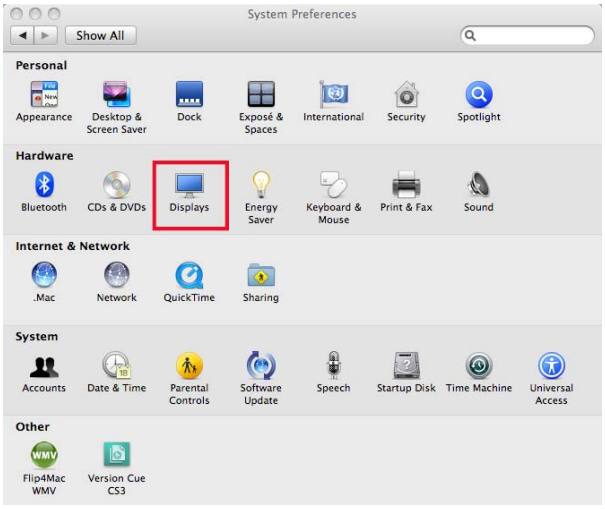


Mac OS X

After software installation, connect the ENMUV to your Mac. The default setting for your displays is extended to the right of the main display.

Select **Displays** from the **System Preferences** menu to configure the settings for each of your USB attached displays. A **Display Preferences** window will open for each of your attached displays allowing you to configure each display as required.

You can also use the Gather Windows button to bring all the Display Preferences windows onto the main display.



Screen Resolution

To setup the screen resolution, select an available resolution from the Display Preferences window.

Screen Rotation

To rotate your screen, use the **Rotate** drop down menu and select an angle of rotation you desire. Each time you rotate the screens, the settings made to the mode, resolution, frequency or depth are remembered the next time you switch back to that angle of rotation.

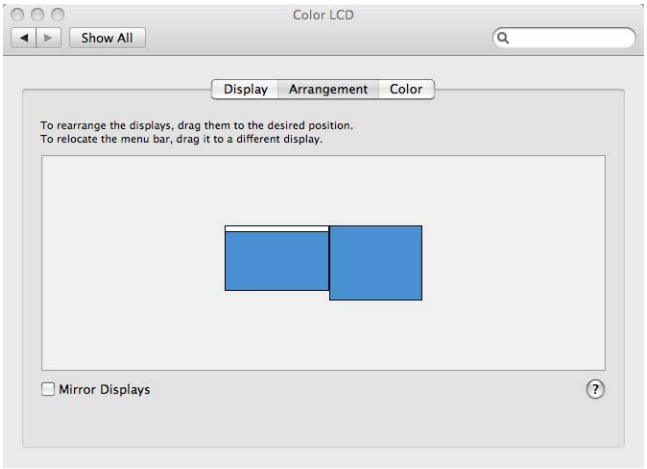
Screen Positioning

You can rearrange the monitor icons so that they match the physical layout of your actual monitors by selecting the **Arrangement** option in Display Preferences. This ensures that you can easily navigate between all connected displays.

If your computer is connected to more than two monitors, you can assign each of the monitors to a different mode.

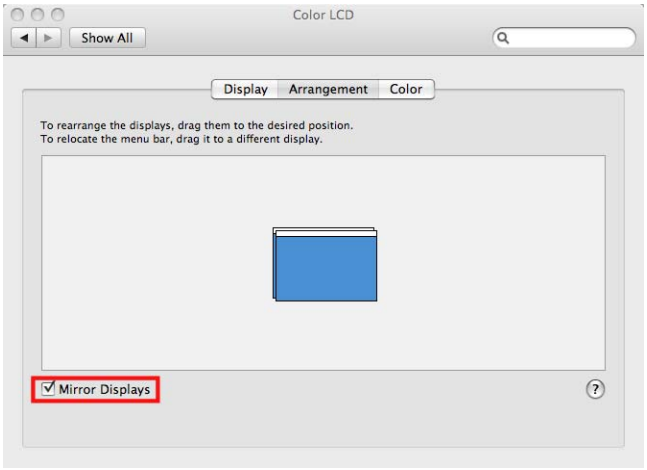
Extend Mode

Extend mode allows you to add extensions to your existing desktop using the extra monitors. To move the position of a display, click and hold the monitor you wish to move then drag it to the desired position. The selected monitor will be highlighted with a red border.



Mirror mode

Mirror mode allows you to replicate the exact image from your primary monitor to your secondary monitor. Check the **Mirror Displays** check box to start mirror mode.



Software Uninstallation

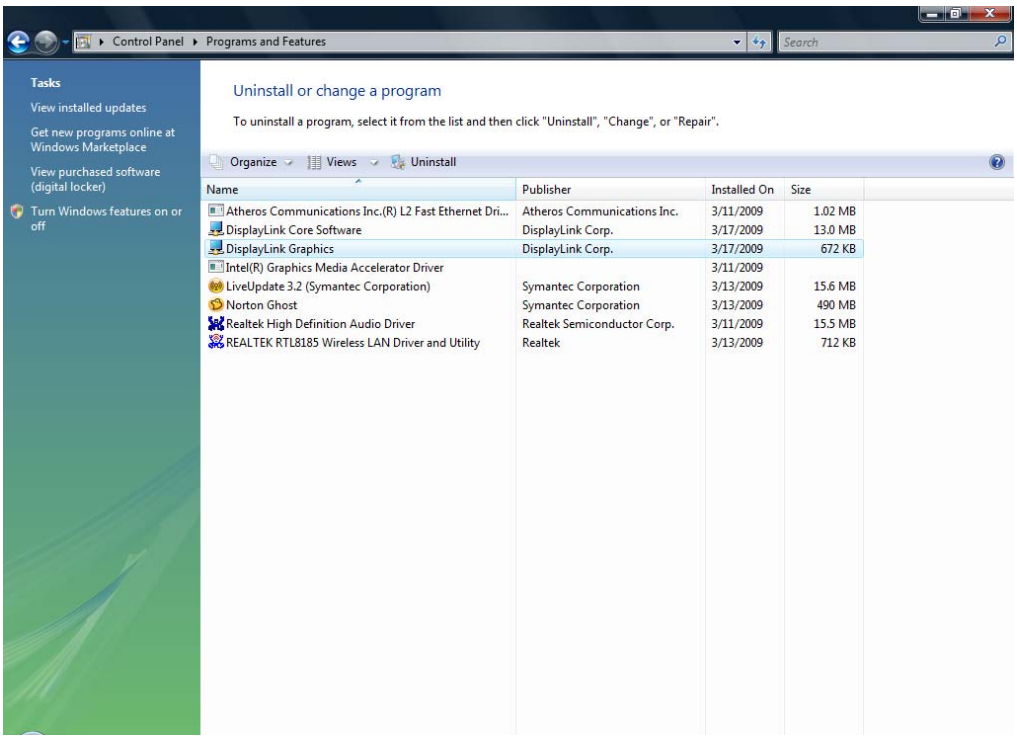
Windows 2000/XP/Vista

1. Open the **Control Panel** on your Windows Vista system, and then double-click the **Programs and Features**.

   Or, open the **Control Panel** on your Windows 2000/XP system, and then double-click the **Add or Remove Programs**.

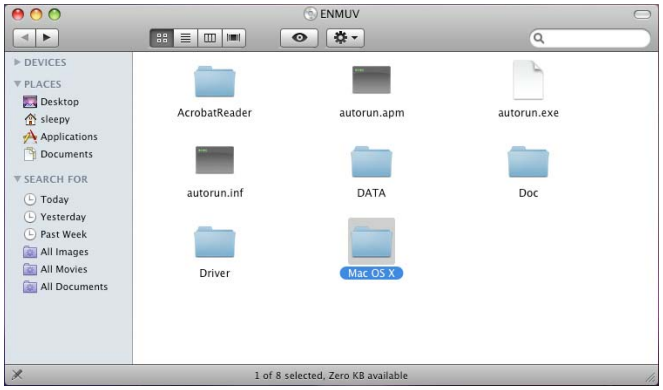
2. Select **DisplayLink Graphics**, and then click the "**Uninstall**" button or "**Change/Remove**" button.

3. Wait a few moments for the process to complete.

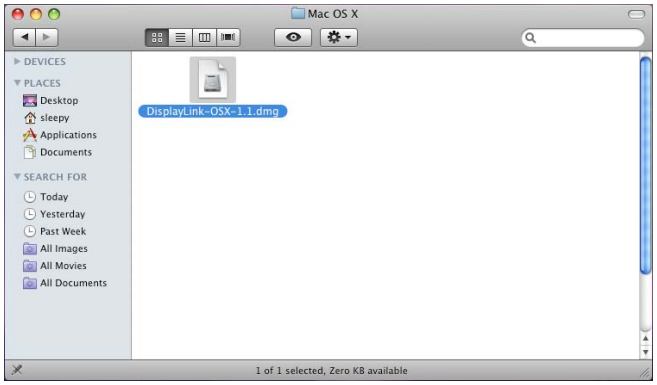

Control Panel ▸ Programs and Features
Search
Tasks
View installed updates
Get new programs online at Windows Marketplace
View purchased software (digital locker)
Turn Windows features on or off
Uninstall or change a program
To uninstall a program, select it from the list and then click "Uninstall", "Change", or "Repair".
Organize
Views
Uninstall
Name
Publisher
Installed On
Size
Atheros Communications Inc.(R) L2 Fast Ethernet Dri... Atheros Communications Inc. 3/11/2009 1.02 MB
DisplayLink Core Software DisplayLink Corp. 3/17/2009 13.0 MB
DisplayLink Graphics DisplayLink Corp. 3/17/2009 672 KB
Intel(R) Graphics Media Accelerator Driver 3/11/2009
LiveUpdate 3.2 (Symantec Corporation) Symantec Corporation 3/13/2009 15.6 MB
Norton Ghost Symantec Corporation 3/13/2009 490 MB
Realtek High Definition Audio Driver Realtek Semiconductor Corp. 3/11/2009 15.5 MB
REALTEK RTL8185 Wireless LAN Driver and Utility Realtek 3/13/2009 712 KB

Mac OS X

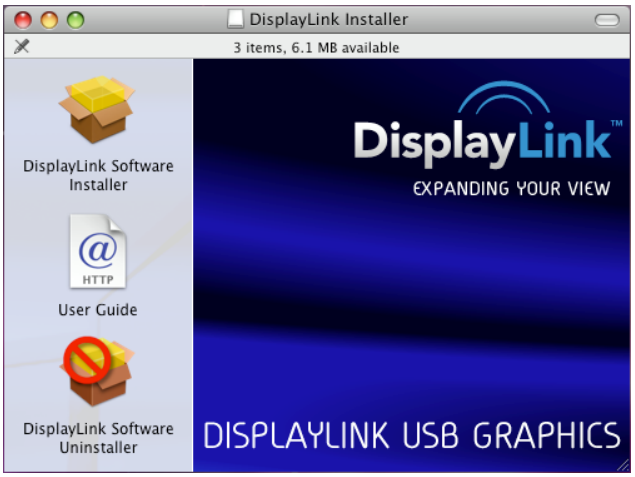
11. Insert the ENMUV CD into the CD-ROM drive. Locate and double-click the ENMUV CD, and then double-click the "**Mac OS X**" folder.



12. Double-click the installer image to mount the installer.



13. Open the "**DisplayLink Software Uninstaller**" to uninstall software.



Product Specifications

System Requirement
- PC with 1.2 GHz or higher processor clock speed, with an Intel® Core 2 Duo® or equivalent CPU
- Intel®-based Mac®
- 512 megabytes (MB) of RAM for a single attached screen, 1 gigabyte (GB) of RAM for two attached screens, more for more attached screens
- At least one USB 2.0 port
- 30 megabytes (MB) of free disk space

Supported OSs
- Microsoft Windows® 2000 Service Pack 4 and up
- Microsoft Windows® XP Service Pack 2 and up
- Microsoft Windows Vista™
- Intel®-based Mac® OS X

Power Mode
- Bus-Power mode

Number of expansions
- Up to 6 USB to DVI-I/VGA Display Adapters (7 monitors)

Package contents
- The ENMUV Adapter
- USB Cable
- DVI to VGA Adapter
- Installation CD

Diagnostic LED
- Power

Display connector
- DVI-I
- VGA (with DVI to D-Sub15 VGA adapter)

Dimensions (W x H x D)
- 50 x 77 x 22 mm

Temperature
- Operating: 0 ~ 40 oC
- Storage: -10 ~ 70 oC

Humidity
- Operating: 10% ~ 90% RH
- Storage: 10% ~ 70% RH

Emission
- FCC Class B
- CE mark Class B
- VCCI-B